

UNITED STATES DEPARTMENT OF COMMERCE United States Pat int and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INV	/ENTOR		60
09/756,41	1 01/08/			F	NIH061.1CF1C
620 NEWP SIXTEENTH	ORT CENTER		` 	CRAN ART UNIT 1623 DATE MAILED:	PAPER NUMBER

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application N		Applicant(s)	• •			
Onice Action Summary	Examiner	56,411	Lori et al. Group Art Unit				
	1	. Crane	1623				
- THE MAILING DATE of this comm		ars on the c	over sheet ben ath				
Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REOF THIS COMMUNICATION. - Extensions of time may be available under the provisions communication. - If the prior for reply specified above is less that thirty (30) of the prior for reply is specified above, such period shall realiure to reply within the set or extended period for reply	of 37 CFR 1.136(a). In no ev days, a reply within the statu lby default, expire SIX (6) M	ent, however, may a story minimum of the	reply be filed after six months fro	m the date of this			
Status							
 [X] Responsive to communication(s) f [] This action is FINAL. [] Since this application is in condition merits is closed in accordance with the condition of the condition	n for allowance exc	cept for forma	l matters, prosecution	1 as to the 53 O.G. 213.			
Disposition of Claims							
[X] Claims ——1-20—— are pending in Of the above claim(s) ——[]—— is/a ☐ Claim(s) —— ☐—— is/are allowed. ☐ Claims ——1-20—— are rejected. ☐ Claim(s) —— ☐—— is/are objected. ☐ Claim(s) —— ☐—— are subject to respect to resp	re withdrawn from	consideration	n.				
Application Papers							
 See the attached Notice of Draftsp. [X] The drawings, filed on -01/08/0 ☐ The drawing(s) filed on -☐- is/are ☐ The specification is objected to by ☐ The oath or declaration is objected 	01 - are [X] appro- e objected to by the the Examiner.	ved [] disappr Examiner.	PTO-948. roved.				
Priority under 35 U.S.C. § 119(a)-(d	1)						
Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d). All Some None of the CERTIFIED copies of the priority documents have been received. received in Application No. (Series Code/Serial Number) - 1 received in the national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: - 1							
Attachment(s)							
[X] InformationDisclosureStatement(s),PTO-1449, Pap [X] Notice of Reference(s) Cited, PTO-892 [] Notice of Draftsperson's Patent Drawing Rev	<u>-</u> -	_	Summary, PTO-413 Informal Patent Application	on, PTO-152			
J.S. Patent Trademark Office	Office Action S	ummary					
PTO-326 (Rev. 04/18/01)			Part of Paper No.	13			

PTO-326 (Rev. 04/18/01 S. N. 09/756,411



5

The Group and/or Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group 1600, Art Unit 1623.

No claims have been cancelled and no new claims have been added as of the date of this Office action, An Information Disclosure Statement (IDS) has been received as of January 8, 2001 and entered herein.

Claims 1-20 remain in the case.

- Claims 1-17 and 20 are rejected under 35 U.S.C. §112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.
- Claims 1-17 and 20 are directed to compounds the chemical identities of which have not been specified and are therefore claimed far more broadly than is supportable by the instant disclosed exemplifications. In claims 16 and 19 in particular, the ingredient "ddC" has not been shown to be active against any retroviral infection including HIV in combination with hydroxyurea or a similarly active compound. In claim 17 the enablement of "AZT" as a active ingredient is questionable in view of the disclosures of the Malley et al. patents which specifically exclude the combination of hydroxyurea and AZT as inactive against HIV in quiescent cells in

25 culture.

5

10

15

combination of hydroxyurea and AZT as inactive against HIV in quiescent cells in culture.

In claims 1-8 and 20 are not properly enabled because it has not been demonstrated herein that any <u>single</u> compound, including hydroxyurea, has been administered as an effective treatment for HIV or any other retroviral infection.

Claims 1-4, 6-7, 9-14, 16-18 and 20 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1, 9, 11–12 and 20, the term "a compound that depletes ...;" in claim 9 the term "an antiviral nucleoside phosphate compound;" and in claims 11 and 12 the term "a second compound that ... inhibit(s) replication ...;" are each directed to chemical compounds which have not been chemically identified thereby rendering the instant claims and some claims dependent therefrom both incomplete and lacking in properly defined metes and bounds. Applicant is respectfully requested to provide specific, chemically identified active ingredient(s) in each independent claim.

- In claims **16 and 17**, the terms "2'-F-dd-araA" and "AZT" are improper because said acronyms (and all other acronyms) are not preceded by a complete chemical name of the compound being referred to; e.g. -- 9-(2-fluoro-2, 3-dideoxyarabinofuransyl)adenine (2'-F-dd-araA) --, or
- 25 -- 2'-fluoro-2', 3'-dideoxyarabinoadenosine (2'-F-dd-araA) --, or -- 3'-deoxy-3'-azidothymidine (AZT) --, or the like.

5

10

15

20

25

The non-statutory double patenting rejection, whether of the obviousness-type or non-obviousness-type, is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent. *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969); *In re Vogel,* 422 F.2d 438, 164 USPQ 619 (CCPA 1970); *In re Van Ornam,* 686 F. 2d 937, 214 USPQ 761 (CCPA 1982); *In re Longi,* 759 F.2d 887, 225 USPQ 645 (Fed. Cir 1985); and *In re Goodman,* 29 USPQ 2d 2010 (Fed. Cir. 1993).

A timely filed terminal disclaimer in compliance with 37 C.F.R. § 1.321(b) and (c) may be used to overcome an actual or provisional rejection based on a non-statutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 C.F.R. §1.78(d).

Effective January 1, 1994, a registered attorney or agent or record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 C.F.R. §3.73(b).

Claims 9-17 and 19 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 12-22 of U.S. Patent No. 6,046,175. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant claims are directed to a binary composition which includes two active ingredients generically defined in a manner which includes the subject matter previously claimed.

5

10

15

20

25

Claims 9-19 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 3-8 of U.S. Patent No. 6,194,390. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant claims are directed to a method of treating HIV in a human host wherein the active ingredients are defined generically in a manner which includes the subject matter of the previously patented claims.

Claims 9-17 and 19 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3 of U.S. Patent No. 5,521,161. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant claims are directed to a method of treating HIV in a human host wherein the active ingredients are defined generically in a manner which includes the subject matter of the previously patented claims.

Claims 9-17 and 19 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3 of U.S. Patent No. 5,736,527. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant claims are directed to a method of treating HIV in a human host wherein the active ingredients are defined generically in a manner which includes the subject matter of the previously patented claims.

Claims 9-19 of this application conflict with claims noted above in Patent Nos. 5,521,161, 5,738,527, 8,048,175 and 8,194,390.

5

10

15

20

25

37 C.F.R. §1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP §822.

Claims 1-8 and 20 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. §112 set forth in this Office action.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. \$103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 C.F.R. \$1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. \$103(c) and potential 35 U.S.C. \$\$102(f) or (g) prior art under 35 U.S.C. \$103(a).

Papers related to this application may be submitted to Group 1600 via facsimile transmission(FAX). The transmission of such papers must conform with the notice published in the Official Gazette (1096 OG 30, November 15, 1989). The telephone numbers for the FAX machines operated by Group 1600 are (703) 308-4556 and 703-305-3592.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner L. E. Crane whose telephone number is 703-308-4639. The examiner can normally be reached between 9:30 AM and 5:00 PM, Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Gary Geist, can be reached at (703)–308–1701.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group 1600 receptionist whose telephone number is 703-308-1235.

LECrane:lec **06/12/01**

5

Patent Examiner

Group 1600